COMTE

AND

THE POSITIVE PHILOSOPHY

Beyond Repair
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PREFACE

Auguste Comte, though as great and erudite a thinker as Bacon or Herbert Spencer, is hardly so widely read by our students. Perhaps the fact that Comte belongs to a foreign literature counts for his being less familiar to the students here; yet his Philosophic system, so well-known by the name of the Positive Philosophy, is one of the most comprehensive of the Philosophic systems of Europe. It is as voluminous as it is erudite and interesting. Those who desire to be acquainted with it, and are unable to wade through Comte's numerous volumes, will find in the following pages an attempt at supplying a brief exposition of its elements in simple language, which it is hoped will not prove untrustworthy or uninteresting.

BOMBAY,

November, 1901.

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CHAPTER I

LIFE OF AUGUSTE COMTE—THE FOUNDER OF THE POSITIVE PHILOSOPHY

France holds a high place in the civilization of Europe for her literature, philosophy and art. In each of these departments she has produced men who have exerted powerful influence on the revolutions of thought for which modern Europe is remarkable. In the domain of philosophy she has given to the world some of the boldest and loftiest thinkers, who have from time to time issued profound and elaborate expositions of systems of thought, and none

perhaps among them is more conspicuous than Auguste Comte "The Bacon of the nineteenth century." The Positive Philosophy, the grand outcome of his genius, proclaims the energies of a great soul struggling to accomplish a lofty purpose. How far his philosophy, on which the entire love of his heart was fixed, has achieved its ambitious object of re-organizing social life, and reforming civilization, is sufficiently clear to the world at the close of the nineteenth century; yet his works, which are a mass of vast erudition and of subtle thought. and which were produced whilst battling against the stern opposition of poverty all his life-time, show what a toil of soul is implied in the progress of this single mind. There are in his writings such energy of intellect, such subtlety of thought, such originality of suggestion, such boldness in destroying, and such skill in rebuilding knowledge and faith, that minds less scientific and less philosophical might be swayed into the belief, that a man with a mission has come

upon the scene to renovate alike science and politics, philosophy and faith, life and worship.

Born of humble parentage on January 19th, 1708, at Montpellier in France, Auguste Comte was brought up a boy of delicate though not sickly appearance, and reserved habits. His education was begun in his ninth year in the college of his native town, where he soon made himself conspicuous as a highly intelligent student. After passing the public competitive examination a year earlier than usual he entered the Polytechnic School at Paris, where he greatly distinguished himself in mathematics: but while he was prosecuting his studies there, the Polytechnic was broken up on account of a quarrel between some of the professors and their pupils, and Comte was then suddenly cut off from higher studies. Thus dejected he returned to Paris to find a livelihood by teaching mathematics to private pupils, but as mathematical instruction promised but a poor subsistence, he ultimately gave it up. At this time he found for himself an employment as secretary to Casimer Perier, banker, author and statesman; but, unfortunately, as his views on important matters collided with those of his master, he had to leave the situation in less than a month.

In 1818 he formed a connection of vast importance with Claude Henri, Count of Saint Simon, the social philosopher and founder of the sect of the Saint Simonians, then engaged in considering a project for the "Reorganization of European Society." To Saint Simon Comte acted in the three-fold character of assistant, pupil and friend. This was the most important period in his life, as it was in this capacity that he was first drawn into the criticism of thought and discussion regarding the faith and practice of mankind, which ever afterwards engrossed his life. From 1818 to 1820 Saint Simon's influence was powerful upon him.

Comte's philosophical ideas were first laid before the public in L'organizateur, the journal

of the Saint Simonians, to which he began to contribute valuable articles. In 1822 Saint Simon published a work on "The social contract," to which Comte supplied a section entitled "A scheme of the labours requisite for the re-organization of society." In 1823 Saint Simon in his "Catèchisme des Industriels," promised a work which he had confided to his pupil Auguste Comte upon "Scientific method and the method of Education;" but when the time for its publication arrived in 1824 he could not get the sort of treatise he wanted from his pupil who had by this time found a theory of his own. This led to a separation between them. The bond of unity between the two had been snapped and thenceforth each took his own way.

This rupture was announced by Comte to a former pupil of his in mathematics and philosophy, M. G. D'Eichthal as "complete and irrevocable," and the event proved to be the birththroe of the Positive Philosophy, the imperfect ideas of which had been revolving in his

mind since 1822, the year in which he once fell into an ecstacy of meditation which continued for eighty consecutive hours.

To M. D'Eichthal he first communicated the elements of the Positive Philosophy on August 5th, 1824, and when his scheme appeared in some respects fully developed, in 1825 he arranged a course of seventy-two lectures on the Positive Philosophy. This course was commenced in Comte's house on 2nd April, 1826, before an audience comprising the intellect of France. Unfortunately, however, when he had not delivered more than three lectures the course had to be abandoned on account of his mind having been deranged by household anxieties, the heavy strain in the production of his new philosophy, in systematic lectures, and the excitement in his controversy with others, and particularly with some of the Saint Simonians.

We need not enter here into an account of his domestic troubles, beyond noting one or two important facts. On 19th February, 1825. Comte married one Miss Massin of the family of Calorine Massin the bookseller to whom he had been introduced. The period following his marriage was one of hard struggle for Comte for livelihood. He could not obtain situations in spite of his best exertions. His mind was upset at the non-recognition of his merits, and, staying at Paris while in this condition, insanity seized him. For nearly a month he had been irritable and passionate, and at last he suddenly left his house and Paris. Madame Comte set out in search of him and found him at Montmorency. She called the local physician who treated him carefully. While the improvement was slowly coming over him, one evening he proposed a walk to the lake d'Enghien to which Madame Comte consented. On arriving at the banks of the lake, Comte made a rush into the water, attempting to drag his wife in along with him. She struggled, resisted, and catching hold of the roots of the

bushes on the bank, saved both. A similar attempt was made a second time in the Spring of 1827, just after his recovery from the first attack of insanity after a treatment in a lunatic asylum in which it became necessary to place him under medical supervision. In the second attempt he threw himself into the Seine from the top of the Pont des Arts. A royal guard who was passing jumped in after him, and brought him to the bank. After this he was taken to Montpellier in a "State of quasivegetation." Home affection and a good constitution fortunately succeeded in restoring him to a complete sanity of mind. He improved in health and once more became fit for absorbing brain-work.

At the close of 1827 he resumed his intellectual labours. In August 1828 he wrote a paper for the Journal of Paris—"An Examination of the Treatise of M. Broussais upon Irritation and Madness." This exertion in criticism at once recalled to his mind the grand

thought which for a while had slipped out of his memory. Forthwith he busied himself to re-arrange his ideas, and after having recalled his purpose, on January 4th, 1829, he recommenced his course of lectures on the Positive Philosophy in his house. His audience this time, besides most of those who attended the inaugural discourses in 1826, comprised also Fourier (the mathematician), Broussais, Esquirol, Binet, and other thinkers. Thus was the Positive Philosophy ushered into the world, and the proper work of Comte's life begun.

In 1830 after presenting a brief outline of his ideas on the progress of thought and the history of science in the "Athenæum," he began the composition of his great work, "The course of Positive Philosophy," of which the first volume was issued in 1832 and the other five at intervals till 1842. These six volumes embracing Science, History, Morals, Theology and human progress were the result of twelve years of hard study, reflection and criticism.

This unflinching labour amidst poverty, pecuniary anxieties and bread-getting pursuits is an excellent example of the positive philosophy of earnestness on which success depends. Such a monumental work was no mean achievement.

Besides being a giant of energy, he had also a prodigious memory which, vastly stored with facts and information, was always ready at hand for immediate service. His books were all planned in his mind without notes or writing; first, in grand outline, then in special subdivisions and subsequently the details proper to each section.

M. Comte knew the English, Spanish, Italian and German languages, and these he learnt by self-application, not having the means to engage a tutor. A resourceless man with neither fortune, position nor pension, he subsisted by taking private pupils, and it was by this harrassing task work that he obtained the means of bestowing on the world the treasure of his thoughts.

In 1832 he was chosen tutor in the Polytechnic School, and in 1836 he was elected examiner for admission to the same school, and professor at the Laville Institution. These appointments, however, he could not hold longer than a year. He was expelled from examinership—a situation which was held by an annual tenure, and also dismissed from the Laville Institution on account of the secret influence of his opponents who had formed themselves into jealous opposition against him. This disastrous opposition to put him down on all occasions made Comte at times dejected and melancholy, at times violent and exasperated. But it had a more serious effect in straining his relations with his wife, and in bringing about a voluntary separation between them. This separation was conducted with mutual prudence; consented to continue to manage his household affairs till his great work was finished, and he should begin to feel the glory of his achievements; he recognised her goodness and her

right to gratitude. For years they corresponded regularly. He allowed her a pension, and she followed his career with interest.

Among English thinkers, some of the earliest who were brought under the influence of Comte were John Austin, George Grote, Sir William Molesworth, Alexander Bain, G. H. Lewes and Raikes Currie.

The earliest British recognition M. Comte received as an original thinker was from Sir David Brewster, who, in the Edinburgh Review, July 1838, noticed his two earliest volumes—those on mathematics, astronomy and physics. In 1843 a higher place was assigned to him by John Stuart Mill, in his "System of Logic," when he spoke of him as greater than Sir John Herschel and Dr. Whewell, and of the "Course of Positive Philosophy" as the greatest work which had been produced upon the philosophy of the sciences. In the same year a brilliant paper by Professor Ferrier appeared Blackwood's Magazine on Comte's system.

In 1846 G. H. Lewes issued his "Biographical History of Philosophy," in which he gave an epitome of the opinions of M. Comte, "The Bacon of the nineteenth century."

In 1843 Comte published his "Elementary Treatise on Analytic Geometry in two and three dimensions," an able and lucid work which has been translated into English, and which was followed by a "Discourse on the Positive Spirit." By this time the "indefatig able hatred" against him by the coterie scientific, political and religious was increasing in intensity and was almost unappeasable It was at this juncture that his English admirers came to his help. They provide him with an immediate monetary aid b which they intended to tide over his difficu ties for the time being. He, however, though the aid would be continued to him as pension in recognition of the work he ha done and to enable him to continue h labours without further interruption. Whe he learned that the sum put at his disposal was only meant to be temporary, he felt not only chagrin, but a sense of injury which led him to sever his connection with his friends, including J. S. Mill, with whom, during the interval of a lively friendship extending over five years, he discussed with philosophy and warmth the question of the rights of women in which M. Comte was conservative and Mr. Mill liberal.

As an evidence at once of his talents and of his endeavours to be a self-supporting thinker his "Philosophical Treatise on Popular Astronomy" was issued in 1845.

Till now labouring after a philosophy of the sciences amidst discouraging circumstances M. Comte had been leading a purely intellectual life. All his former efforts had been made from the intellectual side, because his emotional nature had never been deeply stirred; but now a change came over the spirit of his life's tenor. About this time he came

across a talented woman, one Madame Clotilde de Vaux, whose acquaintance with him added a new interest to his life and reorganized his existence. She exercised a powerful influence over him by demonstrating to him the lordship of the heart over the head, of love over logic—and he has sung pæans of praises over her perfections and virtues. There is pathetic interest in the story of his love with her which we quote below from the record of G. H. Lewes:—

"About the age of forty-five Comte fell in love with an unhappy and remarkable woman separated from her husband. One whole year of chaste and exquisite affection changed his life. He had completed his work on "Positive Philosophy." His scientific elaboration was over. He was now to enter upon the great problems of social life; and by a fortunate coincidence it was at this moment he fell in love. It was then this philosopher was to feel in all its intensity the truth which he before had perceived, viz.,

hat in the mass as in the individual, predominance is due to the affections, because the intellect is really no more than the servant of the affections. A new influence, penetrating like sunshine into the very depths of his being, awakened there the feelings dormant since childhood, and by their light he saw the world under new aspects. He grew religious. He learned to appreciate the abiding and universal influence of the affections. He gained a new glimpse into man's destiny. He aspired to become the founder of a new religion—the religion of humanity.

"For one long blissful year Auguste Comte knew the inexpressible happiness of a profound attachment; and then the consolation of his life was withdrawn from him,—the angel who had appeared to him in his solitude, opening the gates of heaven to his eager gaze, vanished again and left him once more to his loneliness; but although her presence was no longer there, a trace of luminous glory left

behind in the heart of the bereaved man sufficed to make him bear his burden and dedicate his days to that great mission which her love had sanctified.

Feeling the necessity of something more for the satisfaction of man's nature than the aridities of biological science, Comte then extended his aim to the "regeneration of the affections" by the deification of the immense and eternal being-Humanity. This change to the subjective method from the objective method upon which he had based and built the Positive Philosophy caused surprise to many of his disciples, and led to a division among them. Those holding to the philosophical tendencies of the original system thenceforth ignored M. Comte's claim to be regarded as the founder of the Religion of Humanity; while others still remained with him in the latter part of his course in the "extension of his theories to the fundamental evolutions of humanity."

Amidst the convulsions and strife of the Revolution of February, 1848, Comte formed the idea of a Positivist society in favour of "order and progress; a free association for the positive instruction of the people in the whole of Western Europe," with France as the initial centre and himself as its chief. On 8th March he issued on a leaflet: "The appeal of the Founder of the Positivist Society to those who desire to join it." It was formed, and at its meetings Comt delivered some brilliant lectures on subjects philosophical and historical.

He issued in July, 1848, an abstract of his ideas entitled "A Discourse on the Totality of Positivism," and to this he attached "an appeal to the Western Public" against the persecutions to which he was exposed. This appealed to the foundation of a subscription for him by which the means of existence was secured to him till the period of his death, and which was the only source of income available to him.

In 1849 he began to address a series of lectures on "The General History of Humanity" before large audiences in the hall of the Palais Royal. They were delivered extemporaneously every Sunday from March to September, and were listened to with great delight. They are considered to be the most brilliant of the labours of the great master. It was at the last of these lectures that Comte took his farewell of the platform and public audience.

In the midst of all this his pen was never at rest. He had in the meanwhile issued the "Positive Calendar," a full explanation of which is given in the Chapter V. Then followed the "Positivist's Library," a pamphlet, his "Positive Politics; or, a Treatise on Sociology," instituting the religion of humanity, a work in four volumes, the last of which appeared in 1854; and the "Positivist Catechism," a summary of the new philosophy now properly established. In 1856 his latest work was issued from the press under the title of the

"Subjective Synthesis; or, Universal System of conceptions suitable to the normal state of Humanity;" a volume containing the "System of Positive Logic; or, a Treatise on Mathematical Philosophy."

The continued strain on his mind had now undermined his health. Heart disease was followed by cancer in the stomach, and it was evident he was nearing his end. died on the 5th of September, 1857, after having gone through the sufferings of his illness with calmness and equanimity of mind. The man whose whole life was mental restlessness was on the 9th of Seprember laid to his lasting rest amidst regrets and tears of his friends. Thus passed away the great thinker, whose life will always read a strange record of monumental labours, sad privations, terrible earnestness, vast ambitions and bold predictions of the future—not yet realized.

CHAPTER II

THE BASIS OF THE POSITIVE PHILOSOPHY—THE SCIENCES:—THEIR FILIATION AND EVOLUTION

Man is a rational animal, who, from his very infancy up has been asking questions. Surrounded as he is everywhere by everchanging phenomena, his great business has been to get behind the screen, and discover the causes of all the manifestations of the Infinite. Philosophy is the knowledge of the causes and laws of all phenomena. This is Philosophy in the general acceptation of the word—Philosophy apart from Comte. To Positivists it is mere waste of time to attempt an investigation of the causes; this was to be left to Metaphysicians. Positivism rejects Metaphysics. Life is too short to attain

a knowledge of the Absolute. We are to be content if in studying phenomena we learn how they exist; why they exist is for those who choose to dive and swim in the bottomless seas of speculation, and whose fate is often drowning.

Comte based his system on the following three phases of intellectual development: the Theological or Supernatural, the Metaphysical, and the Positive. George Henry Lewes, one of the first to introduce Comte's system to English students, writes, in his exposition of Positivism: "In the supernatural phase the mind seeks causes; it aspires to know the essence of things, and the how and why of their operation. It regards all effects as the production of supernatural agents. Unusual phenomena are interpreted as the signs of the pleasure and displeasure of some god. In the metaphysical phase a modification takes place; the supernatural agents are set aside for abstract forces or entities supposed to inhere in various substances, and capable of engendering phenomena.

In the positive phase the mind convinced of the futility of all inquiry into causes and essences.

restricts itself to the observation and classification of phenomena, and to the discovery of the invariable relations of succession and similitude which things bear to each other; in a word to the discovery of the laws of phenomena." This is the distinguishing point of the Positive Philosophy that it pays all attention to the study of the invariable laws of phenomena while it absolutely ignores the causes. It resembles the more recent agnosticism in so far as it admits its littleness before the unknowable, acknowledges the limits of human undertaking, and deals alone with facts and realities. It is before all things utilitarian. It knows that the invention of words is no explanation of the causes of phenomena. M. Comte regards philosophy not as an endeavour after, but as the attainment of certainty. All the wild ideas conceived in the minds of would-be metaphysi cians are entirely shut out from his school His aim is to establish a cycle of thought in which demonstration and reason would supplant faith, and life would become a reality. The Positive Philosophy attempts to get behind all the individual sciences,-mental, physical, and moral—to show that they are, each and all, single aspects, or, manifestations of one general science, and that they must be investigated by one and the same method. To explain all this is the end of Positivism. Indeed if a philosophy wishes to be considered perfect it must deal with nature in all its aspects organic or inorganic; it must show the connections of man with the inanimate universe, and embrace every truth that concerns our own existence. Nothing is taken for granted, there are no vague hypotheses in Positivism; Comte based his system on hard natural science, the realities of human experience. He has collected all our conceptions of the known and arranged them systematically so that we have a ready refer-

ence to the past; the present is explained as

we go along, and we are thus enabled to improve the future. Thus all the sciences are arranged and classified by M. Comte according to their dependence on each other, and their relation to and influence on human society. This systematization forms a perfect chain, one science being made to link with the other, and the whole to be a complete survey of man and nature. To reduce all possible knowledge to one comprehensible and positive science, to convince men that a perfect knowledge of the laws of nature is absolutely necessary to a right understanding of life, this is M. Comte's aim.

"Nature is only subdued by submission," says Bacon, hence the Positive Philosophy would have us submit to the higher, and devote our attention solely to the study of the laws of nature that come within our daily experience. John Stuart Mill in his article on "Auguste Comte and Positivism" in The Westminister Review, shows the following to

be the fundamental doctrine of a true philosophy according to Comte:-"We have no knowledge of anything but phenomena; and our knowledge of phenomena is relative, not absolute. We know not the essence, nor the real mode of production, of any fact, but only its relations to other facts in the way of succession or of similitude. These relations are constant; that is, always the same in the same circumstances. The constant resemblances which link phenomena together, and the constant sequences which unite them as antecedent and consequent, are termed their laws. The laws of phenomena are all we know respecting them. Their essential nature and their ultimate causes, either efficient or final, are unknown or inscrutable to us."

The teachings of all the great thinkers from Pythogoras down to Comte's own day are analyzed and worked out to proper logical conclusions:—a scale of sciences is the groundwork of the system, and this is made to

evolve itself from the most abstract conceptions of mathematics to the most concrete forms of social *life. Sir William Hamilton's famous doctrine of the relativity of human knowledge has not only led many to a proper understanding of Positivism, but is in itself a coincidence in human thought. Just as Hamilton would have us arrange the sciences as they are less in comprehension and greater in extension, so Comte's series exhibits at once the evolution of human thought.

To some extent this arrangement was suggested by Pascal, Leibnitz, Kant, Hegel and other earlier thinkers, but the perfect system dates from 1822. Newton and Kant had also apprehended the ideas of Positivism, still it remained for Auguste Comte to discover the two-fold law of human evolution which maintains that history and philosophy are, or should be, inseparable. Let us now allow the author to speak for himself. He says, "That each of our principal conceptions, each branch

of our knowledge, passes successively through three different states of theory-the theologic or fictitious; the metaphysic or abstract; the scentific or positive. In other terms the human mind. by its nature, employs successively, in each of its researches, three methods of philosophizing. the character of which is essentially different, and even radically opposed;—at first, the theological method, then the metaphysical, and lastly the positive method. Hence three distinct philosophies, or general systems of conceptions on the aggregate of phenomena which mutually exclude each other; the first is the necessary starting-point of the human intelligence; the third is its fixed and definite state; the second is destined to serve the purpose only of transition.

"In the theologic state the human mind directing its researches to the intimate nature of things, the first causes and the final causes of all those effects which arrest its attention,—in a word towards an absolute knowledge

of things, represents to itself the phenomena as produced by the direct and continuous action of supernatural agents, more or less numerous, whose arbitrary intervention explains all the apparent anomalies of the universe.

"In the metaphysic state, which is in its essence a modification of the former, the supernatural agents are displayed by abstract forces, veritable entities (personified abstractions), inherent in all things, and concerned as capable of engendering by themselves all the observed phenomena—whose explanation thenceforth consists in assigning to each its corresponding entity.

"At last in the positive state, the human mind recognising the impossibility of obtaining absolute notions, renounces the search after the origin and destination of the universe, and the knowledge of the intimate causes of phenomena, to attach itself exclusively to the discovery, by the combined efforts of ratiocina-

tion and observation of their effective laws; that is to say, their unvariable relations of succession and similitude. The explanation of things, reduced now to real terms, becomes nothing more than the connection established between the various individual phenomena and certain general facts, the number of which the progress of science tends continually to diminish.

"The theologic system has reached the highest state of perfection of which it is susceptible when it has substituted the providential action of one only Being for the capricious agency of the numerous independent divinities who had previously been imagined. In like manner the last term of the metaphysic system consists in conceiving, instead of the different special entities, one great general entity, nature, considered as the only source of all phenomena. The perfection of the positive system, towards which it unceasingly tends, though it is not probable it can ever attain to it, would

be the ability to represent all observable phenomena as particular cases of some one general fact; such, for instance, as that of gravitation.

"It is easily conceivable that our understanding, compelled to proceed by degrees almost imperceptible, could not pass abruptly and without an intermediate stage from the theologic to the positive philosophy. Theology and Physics are so profoundly incompatible, their conceptions have a character so radically opposed, that before renouncing the one to employ exclusively the other, the mind must make use of the intermediate conceptions of a bastard character, fit, for that very reason, gradually to operate the transition. Such is the natural destination of metaphysical conceptions; they have no other real utility. By substituting in the study of phenomena, for supernatural directive agency, an inseparable entity residing in things (although this be conceived at first merely as an emanation from the former), man habituates himself by degrees to consider only the facts themselves, the notion of these metaphysical agents being gradually subtilized till they are no longer in the eyes of men of intelligence anything but the names of abstractions. It is impossible to conceive by what other process our understanding would pass from considerations purely supernatural to considerations purely natural, from the theologic to the positive régime."

The Positive Philosophy then resolves itself into three systems or methods, each depending on the other, and each comprising in itself many sub-divisions arranged in scales. Science as a whole is first divided into two great classes—the abstract and concrete sciences. The concrete sciences receive the special attention of Positivists in so much as they are all important to man and involve his daily experience dealing as they do with details; the abstract sciences regard phenomena generally

and in all their varying aspects theoretically and speculatively. The abstract sciences are considered to have reached their fulfilment; they are complete, while the concrete sciences are still evolving themselves to a formal constitution. Comte takes the five fundamental sciences as the basis of his classification; viz, Astronomy, Mechanics, Physics, Chemistry, Physiology, and adds, Social Physics as an essential. It will be seen how the first are abstract in the extreme and influence others while they remain unaffected themselves; the latter, on the other hand, absorb the most concrete facts of man's daily life, and while they do not affect the first they come themselves directly under their influence. is between the two extremes that Tt Comte has devised his delicate system and ranged one above the other according to its successive dependence and its degrees of influence.

noral Pro. [1. Exposition of the main intent of the course; general observations on the Nature, import-iminaries. 2. Exposition of its plan; general observations on the arrangement of the Sciences. SYNOPTECAL VIGW OF THE COURSE OF POSITIVE PHILOSOPHY.

1. General view of muthematical analysis, 2. The calculus of direct functions.

5. The calculus of indirect functions. The calculus of finite differences. 4. The calculus of variations. (1) The Calculus.

The geometry of the ancients. [geometry. The fundamental conceptions of analytical The geometry of the ancients. General view of geometry. The general study of lines.

thematics. General considerations. \(\) (2) Geometry

1. General exposition of the methods of observation. The general study of surfaces. The fundamental principle of mechanics. 4. General theorems of mechanics. (1) Philosophical considerations on the totality of astronomical science. General view of dynamics. General view of statics.

(3) Rational Mechanics.

2. The study of the clementary geometrical pheno-3. The theory of the earth's motion $\left\{ \begin{array}{ll} 2. & \text{Philosophic appreciation of this law.} \\ 3. & \text{Explanation of the phenomena of the heavens by} \end{array} \right.$. The theory of the earth's motion. 1. The universal law of gravitation. 4. Kepler's laws. Mechanical | Astronomy.

inena of the heaven'y bodies.

Geometrical Astronomy.

> (2) General considerations on Astronomy.

> > Astronomy

Philosophical considerations on the totality of physics. Barology (science of weight.) (3) Considerations on positive cosmogony,

ations on Acoustics (science of sound.) Optics (science of vision.) General considerations on the totality of chemistry. A. The doctrine of organic chemistry. The theory of electro-chemistry.	Physiology or Biology Sociology.	(General epitome and conclusion. Abstract of the positive method. The future of the positive doctrine.

The Synoptical view of the course of Positive Philosophy just given in tabular form will enable the reader to observe the particular accuracy of Comte's arrangement from mathematics to Sociology. It has been likened to a ladder of the understanding up which our mind may rise from rung to rung in its progress to perfection. 'Tis nature's method; she does nothing by leaps and bounds, all is orderly progression and evolution.

Having satisfied itself by a thorough investigation of the simple inorganic phenomena, the Positive spirit plods on and on till it arrives at those intricate and complicated questions that have been shrouded by theology and metaphysics. Stripped of these outward garments truth stands out bright, and clear, and all knowledge is then made to converge to one central principle. This has been the goal of all philosophies: to elevate the whole of human existence to a state of co-ordination; but they have failed for want of proper method. Positivism offers us a comprehensive

view of the past, the present, and the future of humanity as being in a state of gradual developement, subject the while to invariable laws like all the phenomena of the wide universe. These laws are within reach and can be easily comprehended; it is our duty, to study, and know these laws if we hope to arrive at a proper state of order and progress.

In working along Comte's system it is observable that while we proceed from one science to another, from the investigation of one set of phenomena to another set, we never get beyond the laws discovered in the earliest section, we still feel the influence of the first rung of the ladder when we have ascended to a rung far loftier, and where quite new laws are at work. It is as though each step, or science, was represented by a great sphere or cycle, and that each cycle was intercepted by the other forming a complete chain.

Comte's conception of Sociology as an actual science was quite a revelation, and came to him in the same way that the ideas of the Solar System came to Galileo and Copernicus. It revolutionized the whole science of life: it brought the study of the phenomena of human society down to the level of an active science: it taught us that individuals and small communities, nations and empires, were alike subject to definite and fixed laws, just as was the phenomena of Biology or any of the exact sciences. Professor Huxley and Spencer are both examples of Comte's great influence on the students of his age and the years which quickly followed. He maintained that the events of history were neither disconnected results, nor the outcome of capricious and promiscuous workings of human energy and effort, but that they were the clear effects of the forced conditions of the laws of external nature acting upon human life, and the reciprocal influence of that life on the cosmic phenomena amidst which it existed and acted. "A century ago thinkers of the greatest eminence were unable to conceive of a really consecutive progression; and humanity as they

thought was destined to move in circles (Vico), or, in oscillations (Condercet)." Sociology must deal with history—the history of humanity proper—the history of order and progress. All attention must be paid to the outcome of revolutions and reformations in the past; we must analyse their results and estimate their benefit to mankind. Progress and order must work hand in hand, it is impossible for any real good to result when the two are not combined. This is Comte's great argument, that History and Philosophy together are essential to a proper science of humanity, that the sciences must be studied in a state of filiation, each a member of one great family, and that evolution must be the method of each. Space does not allow of a review of his great historical survey which is offered in illustration of his theory of the sociological laws. This can be found in its entirety in the "Course of the Positive Philosophy," of which the foregoing sketch is scarcely an epitome.

CHAPTER III

THE STRUCTURE OF THE POSITIVE PHILOSOPHY—SOCIOLOGY

Having elevated all the physical sciences to a proper arrangement and systematization, having lifted the facts of the inorganic world out of the slough of confusion in which he found them, Comte now proceeds to apply the same method in dealing with the science of life—sociology—to systematize the science of ethics and politics. It has been a difficult task for one man to achieve the "ladder of sciences" so far; but, to crown all with a proper constitution of sociology on the same method is a great performance indeed. To observe the phen-

omena of inorganic matter was comparatively easy, but to unravel the secrets of complex phenomena manifesting in human societies is no ordinary achievement. Yet, Comte has succeeded; it was necessary if his philosophy was to be regarded as perfect. He found men again applying metaphysics to the science of life, guessing at its causes instead of studying its laws. When it was not metaphysics theology was the trouble; all ethics appeared to be based on the theological method—the worship of scripture texts.

Comte declared that the intricasies of human existence, with all its multiplex conditions, could only be rightly understood when sociology or the science of life was founded on the positive method—the method that regards all history and life as collective, a united whole and progressive, the entire life of man being interknit in society and yet closely interconnected with the vast order of surrounding nature. A proper unity of the sciences, organic

and inorganic was to be the aim of the philosopher. In the science of society all classes were to be made dependent one upon the other, and this interdependence was to be realized if order and progress were to work in unity.

In the opening of our sketch we remarked that man is a rational animal. He is more: besides intellect and reason, he is in possession of passions and affections unknown to the lower animals. His intellect observes the problems of life; the heart solves the difficulties. The affections predominate, or at least exercise influences over the intellect. This is why the intellect should so far subordinate itself to the heart that the heart may work out all the difficulties and wants of existence, all the problems suggested by the intellect. It, therefore, becomes a demand of sociology that "Thoughts must be systematized before feelings and feelings before actions, for unity of action depends upon unity of impulse and unity of design." Thus, in all its variety of

affections and mental attributes humanity stands higher than animality and always rises above it. It has been scientifically established that man has a spontaneous instinct for the society of his fellow-beings. He is by nature to a certain extent endowed with a benevolent disposition. But his peculiarly individual feelings and his least elevated instincts are especially active and easily excitable. The energies of his emotional nature are so much more mobile and active than his intellectual powers, that they constantly incline to overpower his nobler nature. Hence society exists through a constant interaction between his social and his selfish instincts or proclivities. Again, the necessities of man are only attainable through labour, and all labour is irksome. This sense of irksomeness combined with the pressure of need causes a second interaction of social forces. Indeed there is a struggle of personal interests, of indolence and desire, of deliberate ambitions and imperative necessities, of rest and movement in the individual relations of man with man.

Co-operation, then, is to be the proper and only keystone of a well regulated society. Christian marriage is put forward as the most simple and yet the most perfect example of co-operative unity. Like all sociological unities it is a result of the past, establishes the present, and determines the future. The absurd proposition regarding the equality of sexes is "such stuff as dreams are made of," when we have come through all the physical sciences on the Positive method. The most elementary knowledge of the construction of woman, an analysis of woman's work in the past, shows her to be infinitely inferior to man. Hence the marriage relation is one of subordination for woman. Man's superior mental capacity and greater physical strength points him out as the ruler, but when the proper unity of marriage is realized man becomes to woman what intellect is to the heart. Woman excels man in love while he is greater as a thinker. Woman is therefore to be regarded as the heart of society, so to speak. She is not to busy herself in worldly matters nor set herself up as a rival of man in the pursuits of life. Such a state of affairs would sooner or later prove disastrous. Her attention should be concentrated in the home and family, and her power of love should be cultivated and exercised as a stimulant to the activity of man. When love and activity are so reconciled the universal happiness of mankind will be secured.

From the treatment of the position of woman, Comte passes to that of the leaders of thought and society. The relations of the family are held up as a suggestion and a basis for society at large. Comte's opinion is, that as the father, the head of the household, should direct the education of those under him, should exercise his greater mental capacities in their behalf, so in a proper state of society the thinking should be done by a very small class—

it would be necessarily small-and that these men should be trained in all intellectual matters thoroughly, should be masters of Ethics and Politics. In their special department they should be given the same hearing as a Huxley, or a Tyndall, in theirs. "There is no liberty of conscience," said Comte in an earlier work, "in astronomy, in physics, in chemistry, even in physiology, in the sense that every one would think it absurd not to accept in confidence the principles established in those sciences by the competent persons. If it is otherwise in politics, the reason is merely because the old doctrines having gone by and the new ones not being yet formed, there are not properly, during the interval, any established opinions."

The most perfect communities are judged by their industrialism. Order and peace allow men to work amicably together, and co-operation in labour solidifies society. As in the case of the law of mental evolution which has been shown to pass through the three stages, the

theological, the metaphysical and the Positive, the Philosophy of history proves the same course for material development. We are shown that all human exertion has passed successively through the three phases: offensive warfare, defensive warfare, and industrialism. Ancient history exhibits the warrior as ruler, and warfare as a means of livelihood and the way to wealth. Slavery was the only condition of industry. In Medieval times the warrior became a defender and not an offender, a guard for the regulated labourers who had been freed from slavery, and later, we find in our own day, industrialism mightier than the sword. Trade has now its own defences in its leagues, and guilds, and conventions, and the tyrant is reduced to submission to and dependence on the workers. The dream of socialists is fast becoming a reality. Everything is made to serve the ends of industry. Soldiers are now only employed in the interests of international commerce, science itself is the servant of toil. When the full Positive spirit is made, by good methods of teaching, the common inheritance of all, the federation of the world will quickly follow, and universal brotherhood will be a reality indeed. The unity of life and thought, the acceptance of History and Philosophy as dependent on each other, the evolution of the physical sciences into Sociology, this is Positivism.

It is obvious that something should be done with regard to opinions spiritual and political. As has been already suggested, the thinking faculty of the new society would be a distinct class, not necessarily superior, nor despotic in dogmas, but apart in their special sphere, yet dependent on the whole remainder of the community. There would be a uniform system of education, and knowledge would be common property. The business of the thinker would be the future development of ideas for the benefit of the mass. They would stand apart as Theorists, while the practical class would

regulate affairs material. It must always be remembered that the results of both would be subject to the one method. It would be a part of the thinker's duty to elaborate all our common conceptions. He would be the great teacher, and his doctrines would be order and progress. As the Director of Education he would have to settle all questions directly bearing on social life. The object in view would always be the conservation and progress of society. Men would become so completely infused with a proper sense of right and wrong, the moral consent and agreement in regard to all social duties would be so intact, due to the systematic training of all by one method, that unanimity and unity would absolutely dispense with the necessity for law courts and arbitrators. The spiritual power invested in the thinking class must be allowed absolute freedom in all matters relating to religion, education, and morality. By religion is meant that proper sense of duty and obligation which implies peace and harmony. The province of the thinker would be free from outside influence, while the thinker on his part would *refrain from meddling with the material and temporal affairs of everyday life. As the spiritual power would be decisive in its sphere, so the voice of the temporal power, in satisfying the wants of our Physical nature and exercising judgment in all things material, would be equally conclusive.

Reverting to our original example, as man supports woman so should the active class support the speculative class. It is the capitalist who supplies the wherewithal for material existence and in modern society the procession of this power constitutes him a leader of political opinion. On the other hand it is the working man who is the foundation of political action, and the industrial class in itself supplies the only possible solution of that great problem of humanity—the supremacy of social feeling over the theory that man acts from

the consideration of what will give him personally the most pleasure. Wealth, the power which makes the capitalist a leader, is the result of labour and industry; without the working man the capitalist would cease to exist. Hence the industrial class form the link between the spiritual and temporal powers of the community. There is much then in the hands of the capitalist. He can so regulate and administer wages that women would have no necessity to work in the outside world; he can provide for the proper remuneration of the intellectual class who are working for the common good in the elaboration of science and education. All practical life must depend on science; politics must be subject to scientific thought, and it is only when politics is thus made to agree with the decisions of science and the demands of morality that the interests of society can be really promoted. The department and calling then of the thinker is counsel and education; while the life of the statesman must be one of activity and authoritative direction. Those who occupy the high places of industrialism have it in their hands to effect important ends. The subsistence of thinkers, educators, medical men, and labourers depends on their administration of wealth. The laws of wages, profits, values, and prices would be settled by them according to the positive spirit, and the uniform education they have received, so that comfort and enjoyment would be secured to all alike.

Industrialism is to be the keynote of the new Sociology as opposed to the military supremacy of the past. Religious belief, philosophy, science, commerce, the fine arts and the industrial arts have always been in close and mutual dependence on one another. The new society sees the advisability of considering all as one great whole, inseparable. They must be subject to the one method. There is no attempt to alter the position of power in true Sociology; the aim is to allow power to

remain in the same hands and to bring about its judicious exercise for the benefit of all. Capitalists are two-fold, those in possession of spiritual wealth and those in possession of mere temporal wealth. The two will administer as is most beseeming to concord and happiness. Capital in the latter sense formally established as an institution is essential to that harmony and community of purpose and social interest which can only result from a right division of labour. When labour is divided according to Positive principles, every man will know his own sphere, will realise his own mission on earth, and Comte's own altruism will be the rule of life, selfishness dying a natural death in the process.

The idealism of Positivism is seen in its univer salism; it embraces all classes, this is its essential point, to take in the whole sphere of human existence. Unity of life is maintained by proving to the apparently obscure mechanic that his private functions are one with the

public duties of the community, that all are inter-dependent on each other, and that right not might shall rule differences of opinion. Moral principles shall at all times be considered before governmental regulations. The spiritual power as the depository of morality is to have the settlement of all disputes between capital and labour, and, in truth, is to be constituted general arbiter in all that pertains to practical life. We have already pointed out that the thinker would refrain from meddling with temporal affairs, and it must not be supposed that any contradiction is implied by the above assertion. When the true methods of the positive science have been applied to every department of life a unanimity of feeling would exist that would accord all respect and reference to the Spiritual Power in its judgment in all matters of high moment in ethics, just as the community would attend to the decisions of astronomers in their special department. The methods of this

power would be counsel and conviction, not tyranny and dogmatism, for it would be dealng with educated people—people subject to a uniform training. The peculiar education offered to the mass in the new sociology would be calculated to open men's eyes to the fact that they must answer to the past and future alike, while they cultivate in the present the habit of good fellowship in thought, word and deed. The ancient axiom, that "as a man sows, so shall he reap," would ever be conspicuous. The educators themselves would be absolute masters of their particular branches. free from ambition in politics, and very unlike many "folks-of-all-trades." The same reservation and limitation would characterize the dictators who would steer clear of spiritual matters. To prevent misgovernment creeping in with later generations, each public functionary would have his deputies and would nominate, according to his best judgment, the man most capable of succeeding him. This nomination would be further subject to a committee of superiors who would thoroughly investigate the choice before a formal decision would be given.

This is the sociology of Positivism briefly reviewed for those who would know something of the nature of the contents of Comte's six volumes. Though the tenets of Comte's system cannot be said to be Utopian or chimerical they are still unrealized. It will be remarked that there is much in Comte's teaching akin to the aims of modern socialists, only that his great method, a method only possible in such a brain, is the organization of society on scientific thought.

CHAPTER IV

THE COMPLETION OF THE POSITIVE PHILOSOPHY AS THE RELIGION OF HUMANITY

It must have been remarked how continually Comte returns to the idea of unity and harmony in working out his System, and we are now about to see on what grounds he developed his Philosophy into a religion. We must understand at the outset that the word religion is often misused and applied to any and all theologies. Theology is not religion, and religion is not theology. Once thoroughly understand the distinction and it will be per-

ceived that it is not necessary to have a deity to form a religion. Religion is the sense of obligation or duty. Positivism is atheistic, it is without a god. The unknown and supernatural are ignored, while all attention is devoted to the known, the natural, and Humanity. "No important step can now be taken without totally abandoning the theological principle. The principle of theology is to explain everything by supernatural wills." All the recent attempts to reconcile theology with science have proved futile; theology and Physical Science are absolutely incompatible. Comte in his study of the Philosophy of History had observed what potent factors for good religions had been in their capabilities for binding society together in the past, and because unity was his aim, because he knew that by drawing up a set of rules, a code of morals, a ritual and a worship to which all would become subordinate, he felt justified in giving his Philosophy the form of a religion.

The fundamental doctrine of the Positive religion was to be Universal Brotherhood and the Infinite Nature of Duty. As Theist and Christian were able to crystallize their sentiments round the "First Cause," and the dead Christ respectively, so Positivists were to centre all their worship in the great being—Humanity, in which the three essentials of positivism, love, order and progress are united. Humanity as conceived by Comte, is the Supreme Being, and, as a continuous whole, embracing the past, present, and future, it is infinite and, above all, the only being we can know to any extent, and therefore the only one we can love and worship. Positive Science has shown us how we are all influenced by Physical Phenomena; and Sociology, how we are subject to various social conditions which connect individuals and form the collective mass, the great being-Humanity.

There is no call upon the imagination when performing the worship of Positivism; there is

no incomprehensible being, absolute and infinite, to be taken into account; we are not asked to love something which can neither be comprehended nor demonstrated; all our worship is to be centred in the ever-present being, a being which can be mathematically investigated, a being which can feel our love in so far as it is not infinite and limitless in the usual acceptation of the term-Humanity. "Scientifically defined, therefore, it is truly the Supreme Being-the being which manifests to the fullest extent all the highest attributes of life." When we reflect on the past, when we get away back into antiquity and attempt an estimate of the value of successive generations in the interests of progress, we find that supreme being is, however, a little complex despite the reality of existence. None the less, it is considered a much more profitable object of contemplation than the old "Supreme Being," there is something far more worthy and sublime in the deeds of men in their love of each other, something more deserving of meditation and veneration, than there was in trying to understand the inexplicable records of unintelligible interruption of its own laws, the capricious and arbitrary conduct of deity, as revealed (?) to the writers of the Scriptures. How much more elevating it is to reflect on the labours and sacrifices of heroes and benefactors of the past, those great beings whose love for us, their posterity, enabled them to leave the world a better place than they found it; all our love swells up spontaneously and our best feelings go out to them in grateful remembrance. Science is the basis of this new religion, science according to the positive method, and it is science that will reveal to us the origin. conditions of development, and destiny of mankind.

Prayer, in the new religion, is elevated above all degrading influences of self-interest, the mind and heart go out together for others.

We are to kill out all personal passions and desires and are to live solely for the benefit of others: it is in some respects a religion of mortification. The whole duty of man is the love of Humanity. The Trinity of Humanity is seen in the Past, Present and Future. We are to worship our supreme being in its first manifestation by loving our predecessors in furthering the good works they began; in its second and present manifestation we are to live for others; and we are to live in thought with ideals of the future by laying good foundation for their development, and thus show our worship of the third manifestation of our supreme being.

Science, Poetry, and Morality are re-modelled by Positivism, and are made to constitute a foundation for the destinies of man. Science and Poetry are the essences of the worship offered by the intellect; Morality is the worship offered by the heart. The creed of Positivism (all religions must have a creed) to which obedience and support is demanded, recognises the unvariable laws of Phenomena as exhibited and explained in the positive philosophy, which laws are open to progress and improvement. The love that will be cultivated according to the positive education will be sufficient to strengthen hope and energy for which will be opened a wide range of effort. "The feeling of Duty is to be substituted for Right;" all the "rights of man" consist in doing one's duty. Everyone has duties innumerable towards others, but rights in the ordinary sense can be claimed by none.

Just as Positivism is all-pervading and extends its influence and method to all, so must the worship of the new religion be equally universal. While it is understood that all beliefs of theology, coming as they do from the imagination, are, scientifically speaking, pious frauds when not mere empty words, still, it is allowed that all faiths have their mission to perform, and each must be respected in so far as

it tends and contributes towards the moral and intellectual development of humanity. Other religions can in this way be improved by instilling positive ideas into the minds of their exponents and ministers, and the ideal state of happiness brought one step nearer realization. To develope and consolidate the tenets of the new Sociology and provide for the regulation of social progress, these are the aims of the religion of humanity.

Like History and Science, religion has gradually developed itself through a series of stages. First, there was the old Fetish worship (still existing in savage and semi-civilized communities); then came inspired religion with its absolute truths (?), polytheistic, and later, manotheistic; afterwards, revealed religion; and lastly, demonstrated or positive religion. Life itself, now, is to be considered as one continuous act of worship, and this worship as instituted and regulated by the positive method is calculated to elevate and purify our feelings,

inspire amiable and noble thoughts, and stimulate our activities. Unifying the activities, affections, and intelligence, it will influence alike art, politics and philosophy.

Having provided his religion with a creed, and with something to worship, M. Comte now introduces prayer, priesthood, sacraments, symbols, and ceremonies. We are to pray to the living and the dead, morning, noon, and night. We have already mentioned that prayer had been raised by the positive religion above selfinterest; true prayer is the solemn outpouring of man's nobler feelings; it is more of the nature of meditation according to Comte: it expands our thoughts, suggests the culture of the soul and the development of the affections towards humanity at large. In addressing these daily prayers to collective humanity we are to acknowledge our gratitude for benefits derived from the past in good influences; from the social effects in the present; and for the stimulus to effectual hope in the future.

The nine sacraments with which positivism endeavours to sanctify humanity are, briefly, as follows:—

Presentation. Parents are to present their child to the priests at birth and arrange as to its education for the service of humanity. Initiation. This is the ceremony of placing the child, at the age of fourteen, under the prctection and care of the priesthood after it has already completed the customary home training of the affections, etc. By this sacrament the novice is instilled with the religious impulse. The ceremony of Admission takes place when the seven years of culture have fitted the individual for the proper business of life, and it is calculated to impart solemnity to the recipient of the sacrament. In another seven years (it is remarkable that Comte should thus adhere to the mystical number seven), when the individual's profession in life has been decided upon, a ritual of Destination sanctifies and sanctions the career of manhood if he has attained

normality, that is to say, if he is physically perfect. If he be imbecile, or, otherwise defective, he must be held back in the "infancy" and prohibited from participating in the functions of the normal being. When 'Destination' has been administered to a man he is at liberty to marry, but not before. A woman may marry at twenty-one years of age. Sometimes a special dispensation is granted a man, and he is allowed to marry earlier under extreme and exceptional circumstances. Marriage is not entered into on the old idea of multiplying the species, the intention must be absolutely spiritual. Marriage is permanently binding, and divorce is only permitted when an infamous offence results in loss of social position. Until the sacrament of Maturity is administered a man is somewhat dependent on society and environment, as it were, but when this sacrament is received he becomes a self-existent being, personally responsible for all his actions. The community has prepared him for this dignity and he is now

bound to the service of humanity more than ever. When "the grand climacteric" is reached, the 63rd year of life, man's practical business is supposed to end, and he is to take a change and become a theorist and councillor. He now receives the sacrament of Retirement, and with the sanction of the priesthood nominates his successor. Postivists regard death as a transformation, and Transformation is the final ritual of the religion. He ceases to be objective and passes into a subjective state of existence. This is the positivist's substitute for immortality, the individual is now commemorated by posterity according to his merit. This implies the posthumous sacrament of Incorporation which is administered seven years after death according to the judgment of the priesthood who analyse the individual's actions as observed during life. He is, in a sense, canonised after the manner of the Roman Catholic Church, and is considered worthy of the prayers of the community still living. On the other

hand should the decision of the priesthood be adverse he is ex-communicated and forgotten.

Incorporation, then, is the heaven which all are to strive for, it is the goal of life. To make it more worthy of attainment some new aspect of order or of progress, as exhibited in the life of some special individual, is to be held up for public veneration and edification in every week of the year. This worship offered to predecessors is supposed to stimulate others by creating a spirit of friendly rivalry. These periodical days of venerating the dead correspond again to the Roman Catholic Saints' days. Besides all these festivals in honour of the departed, Positivism provides for all the great interests and epochs of humanity. The greatest of all these festivals would be New Year's day. This would be the festival of humanity. The next five months would be given over to the celebration of festivals in honour of Connubiality, Paternity, Filiality, Fraternity, and Domesticity. As secondary festivals of the New Year's celebration, the nation, the province, and the town would receive recognition respectively. So far all moral sentiments and epochs have been recognized; next would follow the celebration of historic periods of the development of humanity—Spiritualism, Patriarchality, Proletarianism, Fetichism, Polytheism, etc. The future would cover the sum-total of human memories, enjoyments and hopes.

As this is an exposition of Positivism pure and simple, we give, for the benefit of the enthusiast, Comte's idea of Symbolism in his own words:—

"The symbolism of humanity will be a woman about thirty, with a babe in her arms. Temples of humanity, each adorned with such a statue, will arise through the earth, and shall have their frontage towards Paris as the capital of the universe. The processional banners of Positivism shall bear on one side the holy image of humanity in white; and on the reverse, in green, the words: 'Love, Order,

and Progress.' On the political flag of the Occident-green as the colour of hope-there shall be on one side the social and scientific motto, 'Order and Progress,' and on the other the moral and asthetic motto, 'Live for others,' the former being the favourite with men, the latter with women; and the carved image of humanity should be placed on the banner pole. would be There an Occidental navv. which would constitute a maritime chivalry for the protection of the seas, and the promotion of geographical and scientific discovery. An international coinage of gold, silver, and platinum, bearing the image of Charlemagne and the Positivist motto, should form a monetary standard. common International schools and workshops would soon follow; language would come to be regarded as the currency, and literature as the capital of thought. Art would idealize the representation of fact. Poetry would soon link polity and Philosophy together. Education will supply mankind with all

the preliminary feelings and capacities on which the success of Sociology depends, and religion will add the crowning graces of human life."

obvious, then, that M. Comte would have us radically reconstruct society, from the lowest life of the mechanical labourer-the mere coolie-to the high and mighty functionaries of Government. He would instill a love of its great motive power into Industrialism, and make Government thoroughly understand that the public happiness, and not personal aggrandisement, should be its object. He would arrange the whole of society in orderly progressiveness performing its varied functions in harmony; and while science should permiate all life, faith, too, should be founded on demonstration. The whole should disclose a religion clothed in all the beauty of art and poetry and at the same time in strict harmony with science. This is the suggestion offered to the world by Auguste Comte, for its regeneration and salvation, under the title of the Positive Philosophy.

CHAPTER V

THE POSITIVIST CALENDAR

To give a definite form to his doctrine of the worship of humanity, and to fix it upon the mind of his followers ritually, Comte prepared what is known as the Postivist Calendar, which is reproduced in this chapter, for the information of those readers who are curious to know how it is drawn up. A reference to it will show that it substitutes for the saints of the Catholic Church the men who are conspicuous in history as having aided in the development of humanity.

POSITIVIST CALENDAR OR CONCRETE TABLE OF HUMAN PREPARATION. Norr-The names inscribed in Italics designate adjuncts, which in lean vears replace the corresponding types

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tenp yours repince the corresponding types.	F	ARIST		Anaximanas	Heraclitus	Anaxagoras	Democritus.	THALES	Solon	Xenophanes	Empedocles	Thucydides	Archytas	Apollonius of Tyans	Aristinma	Antisthenes			Epictetus	Socrates	Xenocrates	Philo of Alexandria	St. John the Evangelist.	Justin	Origen of Alexand.	PLATO
		ER. Poesy.		Sappho			Euripides	con farors							Pilvai	J	Mennader									
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VI.	ST. PAUL.	CATHOLICISM.	St. Luke Saint Cyprian St. Athanasius St. Jerome St. Ambrose St. Monica Sr. Augustin	Constantine Theodosius Chrysostom. Publierie Genevieve of Paris St. Gregory the Great	St. Benedict Anthony St. Boniface Austra. St. Bidore Bruno Lanfranc S. Anschure Heloise S. Anschure Arch'ts. of Mid. Ages Bener Branara G. Borromens. Fr. Bor. Theresa. Catherine Fig. Sov. Theresa. Catherine Win. Penn. G. Hewy
	R.	LIZATION.	Epaminondas		Cincinatus Regulus Gracchi Macenas Titus Nerva Auretius Utpian
V.	$CA\!\!E\!\!BAR$	MILITARY CIVILIZATION.	Miltiades Leonidas Aristides Ginnon Xenophon Phocion EHENISTOCLES	Perioles Philip Demosthenes Ptoleny Lagus Philopomen Polybins Alexander	Junius Brutus Camillus Fabricius Hamibal Paulus Emilius Marius Scrrot Augustus Vespasian Hadrian Antoninus Papinian A. Severus TRAJAN
	TEDES.	SCIENCE.	Averrhoes	Bythinia Ctesibius	Aratus Nearchus Berosus Sostigenes Nassi-Eddin
ΔI	1.RCHĪMEDES.	ANCIENT SCIENCE,	Theophrastus Herophilus Erasistratus Celsus Galen Avicennes Hrpocratis	Euclid Aristons I Theodosius of Bythinia Hero Puppus Diophantus Appollonius	Endoxas Pytheas Aristarchus Erretosthenes Ptolemy Albategnius, M Hreakchus Varro Columella Viturvius Strabo Pyontinus Plutarch
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POSITIVIST CALENDAR OR CONCRETE TABLE OF HUMAN PREPARATION. Nore-The names incribed in Italics designate adjuncts, which in leap years replace the corresponding types.

IBERG.	Chardin Chardin Gresham Magellan Briggs Delambre	47%	Torricelli Boyle Worcester Fulton Thilorier	ssy Riquet Bourgelat Bougeur Borda Vauban
IX. GUTTEMBERG.	Marco Polo Jacq. Cœur Gama Napier Lacaille	Columbus Benvenuto Cellini Amontons Harrison Dollond Arkwright Conte	Stevinus Mariotte Papin Black Jouffroy Dalton Warr	Bernard of Palissy Guglielmini Duhamel Saussure Coulomb Carnot Montgolfier
VIII. DANTE.	urs Chaucer Burns Goldsmith	Titian Feronese Rembrandt Lesueur Marille Rubens	Joinville Spenser acist Cowper	[Bunyan Louis and De Stael St. Francis Gessner Merceur
VIII. DANTE.	The Troubadours Boccaccio Rabelais Cervantes La Fontaine Defoe	Ariosto Da Vinci M. Angelo Holbein Poussin Velasquez Teniers Raphari	Froissart Camoens Spanish Romancist Chateaubriand Walter Scott Manzoni TASSO	Petrarch A Kempis Layafette Fenelon Klopstock Byron Mirron
d GNE.	eat Henry the [Fowder La Valette Lepanto	[Robieski Tancredi Saladin Marina Raleigh	Leo. IV P. Damian St. Eloi a' Becket Dominic	Matilda Corvinus n. 11e Alphonso X.
VII. CHARLEMAGNE. FEUDAL CIVILIZATION.	Theodonic the Great Pelagius Otho the Great H Henry Villiers La	Alphred Charles Martel The Cid Richard Joan of Arc Albuquerque Bayard Godfenex	Leo the Great. Gerbert Peter the Hermit Seger Alex. III. Francis Invocent III.	St. Clotilda Batilda Stephen Elizabeth of Hun. Blanche of Castile Fed. III. ST. Louis
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XIII.	MODERN SCIENCE	" Tot Doort	Hallen	2	Roemer Roemer	Sawenr	Hamiatt	Permat	Poinsot	Monge.	Bernouilli	Fourter		Scheele	Davy	Geoffron	6	Ritter		Ch. Bell Stahl	Jussien	ricg-d Azyr	Morgagni	and and the	
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XII. FREDERICK.	MODERN POLITY.	Molina	<u>fedicis</u>	Comines Guiceiardini Isahella of Castillo	Sixtus V.		L' Honital	t - 1	Adolphus		! -	PACITATIBN		Orenstienn	Louis XIV.	Mazarin	\tilde{Pombal}	Compomanes	Lambout	7	~	Toussaint	,		
FREL	MODER	Maria di Molina			. —	Lours XI					William III		•			Walpole	D'Aranda	Turgot (Sidney	Franklin	Washington	Bolivar	Francia	CROMWELL	
XI. DESCARTES.	MODERN PHILOSOPHY.	Albert John of Salis	Roger Bacon Lully	ига <i>чоаспіт</i> Сапя	Erc	ia <i>more</i> Aquinas	Spinoza	Bruno	Malebranche	Veuvenargues Lamort Didenot	Leron		Cuias	Fontenelle Mapertuis	Herder	rerot Winckelamnn		nen [seau	Gibbon	Adam Smith Dunoyer	Frente Herangon		Germain		
DESC			•••	••••	Montaigne	Thom of Aguinas	Hobbes		Locke	•	, –	LORD BACON	Grotius.				Ruffer Olen	Leibnitz	Robertson		Condorcet		Hegel	LIUME	4
X. SHAKSPERE.	MODERN DRAMA.	Montalvan	Gullen Castro Guenara	2 22 22 2		***				o Alfieri		9			Montague	Sterne	Richardson	***************************************	Palestrina	Gretry			Donzetti		Committee
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Bissextile Day......General Celebration of Holx Women, Complementary Day.....Universal Celebration of the Dead.

There are three orders or types of men analogous to gods, heroes or saints, celebrated respectively, monthly, weekly, daily. There are thirteen monthly types (because the year is divided into thirteen lunar months), under each of which are ranged chronologically one of them weekly to mark what used to be the Sundays, and the ordinary days of the week are consecrated to the six best emulators of the type which dominates the week. Gratitude towards all the names which truly merit immortality requires a supplementary accessory and hence it is proposed in each leap year to replace the minor or ordinary names by others of a similar sort. The one day which in each year is left over after the fiftytwo weeks have been provided for may be devoted for the next half-century to the reprobation of the three great obstructors of progress—but is normally given to the celebration of the Dead collectively and the extra day in leap year is to be employed for the celebration of all good cromen. All the commemorated belong to the

constructive, not the destructive minds and hence Jesus, Luther, Calvin, Rousseau, etc., are omitted,

CHAPTER VI

POSITIVISM AND ZOROASTRIANISM

THE Positivist religion, as we have seen, limits itself to the relations in which we stand towards one another and towards humanity without reference to the Divine Being. It eliminates God from the universe of thought and nature, and enjoins instead the worship of humanity as its cardinal doctrine. This worship of humanity does not take into account the living ones, however great and noble they be, but those only who have departed from this world, having left it a better place than they found it, by their good thoughts, good words, and good deeds. The souls of those alone are

considered worthy of being worshipped whose lives on earth had been characterized by acts of goodness and nobility towards their fellow-creatures. The Positivist method therefore resolves itself into a system of hero-worship, in which all the past benefactors of humanity are piously remembered as promoters, intellectual and social, of the present state of man.

This system of commemorative hero-worship is by no means a modern one as it is supposed by some. It existed in one shape or another among almost all the nations of antiquity; but among the Iranians it had received a special development, and in a higher form was accepted in the religion of Zoroaster. Two thousand four hundred years before Comte, Zoroaster in his great religion especially instituted this kind of worship to be performed as a sacred obligation to the memory of those who distinguished themselves during their lives by deeds of heroism or usefulness. But Zoroaster, never like Comte, made the worship of humanity the central point of his

religion. It was only subordinate and secondary to the divine worship of Ahura Mazda, the allwise lord.

It is not intended to institute a comparison between the religion of Zoroaster and that of Comte. Excepting the worship of humanity, which is a feature common to both, there is no similarity between them. They are essentially two different creeds, that of Zoroaster being pure and sublime monotheism, that of Comte may be said to be nothing if not universal atheism.

The worship of humanity, as observed before, is to be found more or less in all religions, but nowhere does it appear so prominently as in Zoroastrianism. Zoroastrianism was the first of the great ancient religions to teach the immortality of the soul and a coming world which is "better than the good." It became therefore an important doctrine with it to invoke the spirits of the illustrious and pious dead, spoken of in the Avesta as the Fravashis of the pure. Fravashis are the souls of the pure

deceased worshipped by the living, for the good they have done in their times to their fellowcreatures; in other words, Fravashi is the inner immortal man and that which outlives man. "One of the most evident and best known features of the system attributed to Zoroaster," says Bournouf, the learned founder of the Zend philology, "is the place which human personality and human morality occupy in it. In detaching itself more decidedly from God and nature, Zoroastrianism has certainly taken more account of man than Bhraminism, and it may be said that to a certain point it gained in depth what it lost in extent." Thus in the Avesta the spirits of illustrious dead are invoked in Gahs Havin, Rapithwan and Aivisharithrim and the Yashts or sacrificial songs. Nor are such invocations to be found in the earlier Avestan writings only, but also in the later Pehlevi writings notably Bundahish, a cosmogonic-theological work composed not earlier than the third century of the Christian era. One of

the best known Yashts in the Avesta, called the Farvandin Yasht is entirely devoted to the cultus of the departed souls of the illustrious dead. From beginning to end it is one long list of personages celebrated in the annals of ancient Iran for deeds of usefulness, piety and valour. It will not do here to reproduce this Yasht in its entirety, but it will be enough to give the reader some idea of it, if one or two verses are quoted therefrom:—

"The good, strong, holy Fravashis of the pure we invoke, who are the strongest of the marching, the swiftest of the furthering, who most of the departed look on this world, etc., etc." (Farvindin Yasht, Chapter III, verse 26.)

"The Fravashi of the pure Akhûra, the son of Haogravo praise we, to be able to withstand the Daeva Hashi, the evil and covetousness which slays the world. The Fravashi, of the pure Haoshyanha praise we to withstand the wicked Mazanian and Varanian Daevas, to withstand the torment occasioned by

the Daevas," (Farvandin Yasht, Chapter XXIX, verse 137.)

The list in the Farvandin Yasht may be profitably compared with Comte's Calendar "with great allowance of course," says Mr. R. P. Karkaria, "for the different and widely distant ages in which they were composed. Comte had the whole history and biography for several thousand years to select his heroes from, while the Iranian writer had very stringent limits of time and space. Still, the idea dominating both is in its essence the same-the idea of collective humanity affecting our life through the great individuals who have deserved well of it in the past, and thereby preserving continuity of history and collective human life." There is no distinction made between the Fravashis of males and females, which indirectly indicates the high position women occupied in ancient Iran. Thus are the pious women remembered in the 139th verse of the 30th chapter of the Farvandin Yasht:-

"The Fravashi of the pure Hvôvi praise we The Fravashi of the pure Frèni praise we. The Fravashi of the pure Thriti praise we, etc., etc."

Nor are the great dead of Zoroastrianism alone invoked in the Farvandin Yasht. Breadth of view and liberality are shown therein by invoking the great dead of other religions also, thus displaying a spirit of tolerance unknown to religions like Mahomedanism. In support of this one verse may be quoted from chapter 31st of the Farvandin Yasht:—

"The Fravashis of the pure men in Arian regions praise we. The Fravashis of the pure women in Arian regions praise we. The Fravashis of the pure men in the Turânian regions praise we. The Fravashis of the pure women in the Turânian regions praise we, etc., etc."

It will be interesting to note that the Parsees of the present day, like their ancestors, preserve a record of the names of their illustrious dead making it up to date by adding to it the names of celebrated personages as

they gradually depart from this world. This list of names in the Zoroastrian liturgy is chanted in the introduction to the Afringan ceremony by priests with great solemnity. "Here then," observes Mr. Karkaria, "whilst listening to the priest, sitting before the fire, the everlasting emblem of the Deity, and reciting in one half hour the names of the illustrious dead from Gayomard the first created man down to the philanthropic Settia who died the other day, or a member of the family who is taken from us to-day, one is forcibly reminded of the idea of continuity in human life, of the blending of generations and ages into one continuous whole. One loses as it were his individual importance and existence when brought face to face with the past in this striking impressive manner whilst listening to this roll-call of the dead, he finds his proper place in the vast world of humanity, which he is impressively reminded consists not of the present alone, but

of which the past form a much more important part."

Thus Zoroastrianism, more than any other religion of antiquity, holds before humanity the worship of humanity as thorough and as grand as that which the Positivist religion enforces upon its disciples; but, at the same time, Zoroastrianism does not dethrone God by substituting humanity in the place of Divinity as is done in the system of Comte. The religious system of Comte, then, may be said to be the latest attempt at creating a universal religion, unconsciously copying its essential principal from one of the earliest if not the earliest of religions and Philosophical systems.

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